

DRAFT

6 Mar

Water Effluents Feasibility Study

(1) Theoretical Analysis

- a. what types of effluents are associated with various types of activities? (General type & volume)
- b. what are the chemical constituents of various types of effluents?
- c. what are the physical & chemical characteristics of these constituents?

e.g. densities (10 water density)

emissivities
temperatures
color
radiation characteristics

d. etc.

(2) Evaluation

- a. to what extent and reliability could detection and measurement of these various types of effluents determine activities at their source. Ambiguities?
- b. can the source be identified by recognition (by any method) of the effluent type and/or its constituents?
- c. determine the best part(s) of the electromagnetic spectrum to detect various types of effluents.

(0.01⁰ thru 25⁴)

d. etc

Continued...

(3) Recording Methods for Various Types of Effluent:

a. film (UV, Visible, IR) *h*
color
(1000 ⁰ - 14 μ)

b. mag. tape

c. gamma ray counters

d. etc.

(4) Interpretation Methods

a. the eye (photo interpretation)

b. microdensitometry

c. computer program

d. etc.

July 1945

My thoughts on proposed Water Effluents
Study - 998685

As a "feasibility study" this proposal seems to have some merit. In my opinion the subject seems to be worth a funding for Phase I. I must say, however, that as I was reading the proposal I was wondering how often "camouflaged, underground or previously unknown" industrial plants go undetected and unidentified after having been remotely imaged by the existing operational camera systems and other sensors such as

investigators, after spending a lot of time on literature searching, discussion with experts, field sampling on the ground and

laboratory testing (i.e. "obtain spectral reflectance and emissivity values from different types of concentrated critical effluents") may very possibly not come up with too much information which will be applicable to the task of remote sensing.